

**THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Appellants: Bortlik, et al.  
Appl. No.: 10/568,704  
Conf. No.: 4852  
Filed: February 16, 2006  
Title: NATURAL LYCOPENE CONCENTRATE AND METHOD FOR  
PRODUCTION THEREOF  
Art Unit: 1655  
Examiner: Qiuwen Mi  
Docket No.: 3712036-00706

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPELLANTS' REPLY BRIEF**

Sir:

**I. INTRODUCTION**

Appellants submit Appellants' Reply Brief in response to the Examiner's Answer dated October 29, 2010 pursuant to 37 C.F.R. § 41.41(a). Appellants respectfully submit that the Examiner's Answer has failed to remedy the deficiencies with respect to the final Office Action dated May 27, 2010, as noted in Appellants' Appeal Brief filed on September 29, 2010, for at least the reasons set forth below. Accordingly, Appellants respectfully request that the rejections of pending Claims 1, 3-5 and 9-11 be reversed.

**II. THE REJECTION OF CLAIMS 1, 3-5 AND 9-11 UNDER 35 U.S.C. §112, SECOND PARAGRAPH SHOULD BE REVERSED BECAUSE THE CLAIMS ARE SUFFICIENTLY DEFINITE TO SATISFY THE REQUIREMENTS UNDER 35 U.S.C. §112, SECOND PARAGRAPH**

Appellants respectfully request that the Board reverse the rejections of Claims 1, 3-5 and 9-11 under 35 U.S.C. §112, second paragraph, because the skilled artisan would immediately understand the scope of the claims when read in view of the specification.

In the Examiner's Answer, the Examiner continues to assert that "natural" is a relative term and that "some people might consider that only tomato concentrate going through squeezing or pressing procedure is considered as 'natural', and most people would consider then 'NaOH' is added to a tomato concentrate . . . it is not 'natural', as a natural tomato doesn't contain NaOH solution." See, Examiner's Answer, page 8, lines 1-7. The Examiner also asserts that "[b]ecause a naturally existing tomato juice is acidic in its pH value, then acidic is its native characteristic. By adding 'NaOH' to neutralize its pH it seems to exactly 'subject to technological treatments that would modify it's native characteristics.'" See, Examiner's Answer, page 9, lines 11-13. Appellants respectfully disagree and submit that the skilled artisan would immediately understand the scope of the claims when read in view of the specification.

Initially, Appellants note that the specification expressly states that "[t]he aim of the present invention is to provide a 'natural' product with increased bioavailability, that is to say that the product has only been subjected to technological treatments which do not modify its native characteristics." See, specification, page 3, paragraph 7 (emphasis added). The specification further states that "the process of extraction according to the invention is simple, rapid and economical and at no time subject to the state of viability of the endoenzymes of the raw material." See, specification, page 4, paragraph 8. The specification further states that "the concentrate is a lycopene powder which is water-soluble at room temperature, this being without using a solvent during the process in order to preserve the natural nature of the product in order to provide the consumer with a concentrate with a high bioactivity." See, specification, page 5, paragraph 20. As such, Appellants respectfully submit that any treatments disclosed in the specification as being possible treatments for use to arrive at the presently claimed natural lycopene concentrations would be understood by the skilled artisan to be a treatment that does

not modify the native characteristics of the natural product. Appellants' express definition of a "natural" product requires such an interpretation.

Further, and in contrast to the Examiner's suggestion, the claims cannot be read in a vacuum so as to allow for any possible interpretation of the word "natural." Instead, the Federal Circuit has found time and again, that claims must be read in view of the specification, of which they are a part. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995). Since the specification expressly defined a "natural" product, and since the specification clearly discloses that treatments of alkalization, boiling, filtration, acidification, etc. may be used to obtain the "natural" product, it must follow that treatments of alkalization, boiling, filtration, acidification, etc. do not modify the native characteristics of the product. Indeed, Appellants submit that, when the claims are read in view of the specification, the skilled artisan would immediately appreciate that using NaOH to alkalize a lycopene-containing composition, or acidifying a filtrate prior to centrifugation clearly does not change the native characteristics of the ultimate lycopene-containing composition because, as discussed above, the lycopene concentrate "has only been subjected to technological treatments which do not modify its native characteristics."

Moreover, the Manual for Patent Examining Procedures ("MPEP") and case law precedent have found time and again that an applicant for patent may be her own lexicographer. Indeed, the Federal Circuit has found that "[p]atent law allows the inventor to be his own lexicographer ... [T]he specification aids in ascertaining the scope and meaning of the language employed in the claims inasmuch as words must be used in the same way in both the claims and the specification. *United States v. Teletronics, Inc.*, 8 U.S.P.Q. 2d 1217, 1220 (Fed. Cir. 1988). As such, Appellants may define "natural" in any manner desired. "By statute . . . Congress has placed no limitations on how an applicant claims his invention, so long as the specification concludes with claims which particularly point out and distinctly claim that invention." *In re Pilkington*, 162 U.S.P.Q. 145, 148 (C.C.P.A. 1996). Therefore, in contrast to the Examiner's suggestion, there exists no requirement for patentability that Appellants must define terms to mean what "most people" would expect the term to mean. Moreover, Appellants have chosen a definition of the term "natural" that Appellants submit corresponds with a skilled artisan's understanding of the term. Indeed, it seems logical that a "natural" product would not have been subject to technological treatments that would modify its native characteristics.

As a result, the metes and bounds of the phrase “natural lycopene concentrate” are clear to the skilled artisan in view of the specification, the knowledge of the skilled artisan, as well as commonly used definitions of the terms. For at least the above, mentioned reasons, Appellants respectfully submit that Claims 1, 3-5 and 9-11 fully comply with the requirements under 35 U.S.C. §112, second paragraph.

Accordingly, Appellants respectfully request that the rejection of Claims 1, 3-5 and 9-11 under §112, second paragraph, be reconsidered and withdrawn.

**III. THE REJECTION OF CLAIMS 1, 3-5 AND 9-11 UNDER 35 U.S.C. §103(a) SHOULD BE REVERSED BECAUSE THE EXAMINER HAS FAILED TO ESTABLISH A *PRIMA FACIE* CASE OF OBVIOUSNESS**

Appellants respectfully request that the Board reverse the rejections of Claims 1, 3-5 and 9-11 under 35 U.S.C. §103(a) because the Examiner has still failed to establish a *prima facie* case of obviousness with respect to the cited references. Appellants respectfully submit that the cited references fail to disclose or suggest each and every element of the present claims and that skilled artisan would have no reason to modify *Kesharlal* to arrive at the present claims.

1. *Kesharlal* Fails to Disclose or Suggest Each and Every Element of the Present Claims

*Kesharlal* fails to disclose or suggest natural lycopene concentrates comprising at least 1 mg of lycopene per g of the said concentrate, not more than 30% proteins, not more than 30% polysaccharides, not more than 10% organic acids, and at least 30% of lipid compounds, wherein the concentrate is ingestible, in powder form and isolated from fibers and other insoluble compounds by solid-liquid separation, and wherein the concentrate is extracted from a lycopene-containing material without using a solvent as required, in part, by independent Claims 1 and 10-11, and as is admitted by the Examiner. In fact, in the Examiner’s Answer, the Examiner expressly states that “*Kesharlal* teaches every limitation of the claims, except ‘not more than 30% protein.’” See, Examiner’s Answer, page 11, lines 3-4.

For at least the above-mentioned reasons, Appellants respectfully submit that *Kesharlal* is deficient with respect to the present claims.

Accordingly, Appellants respectfully request that the obviousness rejection of Claims 1, 3-5 and 9-11 under 35 U.S.C. §103(a) be reconsidered and reversed.

2. The Skilled Artisan Would Have No Reason to Modify *Kesharlal* to Arrive at the Present Claims

Although the Examiner admits that *Kesharlal* fails to disclose or suggest each and every element of the present claims, the Examiner continues to assert that “[i]t would have been obvious for one of the ordinary skills in the art to choose different protein levels from the taught range of 10-50%, picking ranges of protein concentrations of 10-30% or 30-50% according to the preference of the consumers which is well within the purview of the skilled artisan.” See, Examiner’s Answer, page 11, lines 13-16. Appellants respectfully disagree and submit that *Kesharlal* teaches away from the present claims.

For example, since *Kesharlal* “teaches a protein range from about 10-50%,” *Kesharlal* clearly discloses that protein amounts in the range of 30-50% are acceptable. However, this is in direct contrast to the present claims that explicitly require “no more than 30% proteins.” Appellants submit that “no more than 30% proteins” clearly means that the composition cannot have protein in amounts greater than 30%, and that amounts in excess of 30% protein would be unacceptable for the presently claimed compositions. As such, the disclosure of *Kesharlal* clearly teaches away from the present claims.

The Examiner states that “*Kesharlal* does not ‘teach away’ from the claimed invention, as it does not say ‘more than 30% of the protein will not work.’” See, Examiner’s Answer, page 11, lines 16-17. However, Appellants respectfully disagree and submit that such an explicit disparagement is not required in order for a reference to teach away from a claimed invention. Indeed, the presence of 30-50% protein in the composition of *Kesharlal* is not merely the disclosure of an alternative embodiment. Rather, the presence of 30-50% protein in the compositions of *Kesharlal* teaches that such amounts of protein are not only acceptable, but also preferred. See, *Kesharlal*, Examples. In contrast, the present claims clearly require the opposite

conclusion that more than 30% protein is not an acceptable amount. As such, Appellants submit that the disclosure of *Kesharlal* clearly teaches away from the present claims.

For at least the above-mentioned reasons, Appellants respectfully submit that *Kesharlal* is deficient with respect to the present claims.

Accordingly, Appellants respectfully request that the obviousness rejection of Claims 1, 3-5 and 9-11 under 35 U.S.C. §103(a) to *Kesharlal* be reconsidered and reversed.

#### IV. CONCLUSION

For the foregoing reasons, Appellants respectfully submit that the Examiner's Answer does not remedy the deficiencies noted in Appellants' Appeal Brief with respect to the final Office Action. Therefore, Appellants respectfully request that the Board of Appeals reverse the indefiniteness and obviousness rejections with respect to Claims 1, 3-5 and 9-11.

No fee is due in connection with this Reply Brief. The Director is authorized to charge any fees that may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 3712036-00706 on the account statement.

Respectfully submitted,

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